

MAGOH Protein, Human (His)

Cat. No.:	HY-P76484
Synonyms:	Protein mago nashi homolog; MAGOH; MAGOHA
Species:	Human
Source:	E. coli
Accession:	P61326 (M1-I146)
Gene ID:	4116
Molecular Weight:	Approximately 18 kDa.

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of 137 mM NaCl, 2.7 mM KCl, 10 mM Na ₂ HPO ₄ , 1.8 mM KH ₂ PO ₄ , 20% Glycerol, pH 4.5.. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	MAGOH is an essential component of the spliceosome, contributing to pre-mRNA splicing processes. Acting redundantly with MAGOHB, it forms the core of the exon junction complex (EJC) and participates in the nonsense-mediated decay (NMD) pathway. The EJC is a dynamic structure involved in various aspects of mRNA metabolism, such as marking the exon-exon junction in mature mRNA and influencing downstream processes like nuclear mRNA export, subcellular mRNA localization, translation efficiency, and NMD. The MAGOH-RBM8A heterodimer, a key element of the EJC, inhibits the ATPase activity of EIF4A3, stabilizing the ATP-bound EJC core on spliced mRNA. This stable conformation interacts with the EJC regulator PYM1 in the cytoplasm, leading to EJC disassembly and enhancing translation of EJC-bearing spliced mRNAs by recruiting them to the ribosomal 48S preinitiation complex. MAGOH is also implicated in the splicing modulation of apoptotic genes, inhibiting the formation of proapoptotic isoforms like Bcl-X(S). In association with RBM8A, MAGOH is a core component of the mRNA splicing-dependent EJC and is identified in the spliceosome C complex.
------------	--

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA